

REMARKS

Applicants thank the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119, and receipt of a certified copy of the priority document Japanese Patent Application No. 2003-036459 submitted August 10, 2004.

Applicants thank the Examiner for considering the references cited with the Information Disclosure Statement filed August 10, 2004. Additionally, Applicants thank the Examiner for indicating the Formal Drawings filed February 13, 2004, are accepted.

Applicants thank the Examiner for acknowledging the election without traverse of claims 1-21 in the Response to Restriction Requirement filed March 25, 2005, and for acknowledging the election without traverse of claims 1-3, 8, 9, 15, 16 and 18-20 in the Response to Election of Species filed August 1, 2005.

Specification Objection

The Examiner has objected to the Specification alleging that the title of the invention is not sufficiently descriptive. The title has been amended to be more descriptive. Thus, withdrawal of this objection is respectfully requested.

Indefiniteness Rejection

The Examiner has rejected claims 2 and 9 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Examiner submits that the expression “at least 30 nm or less” is indefinite. Applicants respectfully note that this phrase was only present in claims 3 and 9. The

informalities noted by the Examiner have been corrected by amending claims 3 and 9. Thus, withdrawal of the rejection is respectfully requested.

Anticipation Rejection in view of Ahn

The Examiner has rejected claims 1-3, 8, 9, 15, 16, and 18-20 under 35 U.S.C. § 102(e) as being anticipated by Ahn et al. (U.S. Patent Application No. 2003/0124812; hereinafter “Ahn”).

Claims 1 and 2

Regarding this rejection, Applicants submit that Ahn fails to disclose a lower electrode having “a bottom portion having a thickness greater than a side wall portion,” as recited in claims 1 and 2. While Ahn discusses a lower electrode 29a, it fails to disclose any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has not indicated within the Office Action any portion of the reference which shows such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claims 1 and 2 be reconsidered and withdrawn.

Claim 3 and 9

Regarding this rejection, Applicants submit that Ahn fails to disclose a lower electrode that “has a thickness of 30 nm or greater at the bottom portion of said lower electrode and a thickness of less than 30 nm at a side wall portion of said lower electrode,” as recited in claims 3 and 9. As discussed above, this reference fails to disclose or suggest any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has failed to indicate any portion of the reference that discloses such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claims 3 and 9 be reconsidered and withdrawn.

Claim 8

Regarding this rejection, Applicants submit that Ahn fails to disclose a lower electrode “connected at only an entire bottom of said lower electrode to said second metal layer,” as recited in claim 8. Ahn discloses a metal layer 21 and a lower electrode 29a, but only shows the lower electrode connected a small portion of its bottom surface to the metal layer, not an entire bottom portion of said electrode as recited in claim 8.

Therefore, at least in view of the above, Applicants respectfully submit that the rejection of claim 8 be reconsidered and withdrawn.

Thus, Applicants respectfully submit that independent claims 1-3, 8 and 9 are patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 15, 16 and 18-20 are allowable *at least* by virtue of their dependency, and by virtue of the features recited therein.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Anticipation Rejection in view of Lane

Claims 1-3, 8, 9, 15, and 20 stand rejected under 35 U.S.C. § 102(b) as allegedly unpatentable over Lane (U.S. Patent Application No. 2002/0048870; hereinafter “Lane”).

Claims 1 and 2

Regarding this rejection, Applicants submit that Lane fails to disclose a lower electrode having “a bottom portion having a thickness greater than a side wall portion,” as recited in claims 1 and 2. Lane discusses a lower electrode 70, but it fails to disclose any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has not indicated within the Office Action any portion of the reference which shows such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claims 1 and 2 be reconsidered and withdrawn.

Claim 3 and 9

Regarding this rejection, Applicants submit that Lane fails to disclose a lower electrode that “has a thickness of 30 nm or greater at the bottom portion of said lower electrode and a thickness of less than 30 nm at a side wall portion of said lower electrode,” as recited in claims 3 and 9. As discussed above, this reference fails to disclose or suggest any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has failed to indicate any portion of the reference that discloses such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claims 3 and 9 be reconsidered and withdrawn.

Claim 8

Regarding this rejection, Applicants submit that Lane fails to disclose a lower electrode “connected at only an entire bottom of said lower electrode to said second metal layer,” as recited in claim 8. Lane discloses a metal layer 60 and a lower electrode 70, but it is connected

at both a side and bottom portion of the lower electrode 70, not at only an entire bottom portion of said lower electrode, as recited in claim 8.

Therefore, at least in view of the above, Applicants respectfully submit that the rejection of claim 8 be reconsidered and withdrawn.

Thus, Applicants respectfully submit that independent claims 1-3, 8 and 9 are patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 15 and 20 are allowable *at least* by virtue of their dependency, and by virtue of the features recited therein.

Anticipation Rejection in view of Lee

Claims 1-3, 15, 16, and 19 stand rejected under 35 U.S.C. § 102(b) as allegedly unpatentable over Lee et al. (U.S. Patent Application No. 2002/ 0052126; hereinafter “Lee”).

Claims 1 and 2

Regarding this rejection, Applicants submit that Lee fails to disclose a lower electrode having “a bottom portion having a thickness greater than a side wall portion,” as recited in claims 1 and 2. While Lee discusses a lower electrode, it fails to disclose any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has not indicated within the Office Action any portion of the reference which shows such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claims 1 and 2 be reconsidered and withdrawn.

Claim 3

Regarding this rejection, Applicants submit that Lee fails to disclose a lower electrode that “has a thickness of 30 nm or greater at the bottom portion of said lower electrode and a thickness of less than 30 nm at a side wall portion of said lower electrode,” as recited in claim 3. As discussed above, this reference fails to disclose or suggest any thickness relationship between a side wall portion and a bottom portion. Further, the Examiner has failed to indicate any portion of the reference that discloses such a feature.

Therefore, at least in view of the above, Applicant respectfully submits that the rejection of claim 3 be reconsidered and withdrawn.

Thus, Applicants respectfully submit that independent claims 1-3, are patentable over the applied references. Further, Applicants respectfully submit that rejected dependent claims 15, 16 and 19 are allowable *at least* by virtue of their dependency, and by virtue of the features recited therein.

New Claims

Claims 49-52 are hereby added. Claims 49-52 are fully supported by Figures 5 and 40. Claims 49-52 are respectfully submitted to be allowable by virtue of the features recited therein.

Conclusion

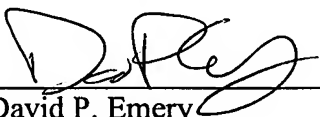
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER C.F.R. § 1.111
U.S. Application No. 10/777,704

Q79889

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,


David P. Emery
Registration No. 55,154

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 18, 2005